

## FOUR NEW MYRMECOPHILOUS COLEOPTERA.

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The following brief paper is offered primarily for the purpose of making known a most remarkable Rhyncophorous myrmecophile recently discovered in Arizona by Mr. Wm. M. Mann. Opportunity is taken however to describe three other myrmecophilous novelties, two sent me by Mr. Mann, the other found by myself in California. Two of the four species are notable, in that new genera must be erected for their reception.

*Liometophilus* gen. nov. (Curculionidæ).

Body narrow, costate, and clothed with non-contiguous appressed, and short stout erect, scales. Head evenly convex; eyes small, coarsely granulated, completely uncovered and separated by five or six times their own width as seen from the front. Beak shorter than the prothorax, subequal in length to the front thighs, moderately stout, feebly evenly arcuate, gradually feebly narrowed to the antennal insertion (as viewed from the front), the tip a little expanded. Antennæ inserted at apical  $2/5$ , scrobes lateral, continued beyond the point of insertion to the apex, scape not quite reaching the eye; funicle 6-jointed, first joint obconic; nearly twice as long as wide, second narrower and a little shorter, 3-6 subequal in length, gradually wider, each a little shorter than the second, the sixth as wide as long; entire funicle and club pubescent, the latter ovate pointed, as long as the three preceding joints and feebly annulate in outer half. Prothorax longer than wide, dorsum strongly produced over the head, disk bicostate from the front margin to a strongly elevated submedian transverse ridge which extends from side to side and is abruptly almost vertically declivous behind. At the bottom of the declivity is a transverse impressed line each side, behind which the surface becomes convex. Elytra elongate, wider than the thorax, sides broadly arcuate, humeri distinct, apices separately rounded, disk with rows of rather coarse punctures, the second, third, fifth and seventh interspaces costiform and bearing a series of stout erect scales. Pectoral channel deep and wide, extending into the mesosternum, the margin of the recess broadly flaring and prominent. Mesosternal epimera narrowly attaining the prothorax, gradually wider posteriorly, the episterna not reaching the elytral margin. Metasternum longer than the first ventral segment, side pieces narrowly exposed, the suture indistinct because of the vestiture. First, second and fifth ventral segments longer, third and fourth equal, each a little shorter than the second; first suture fine, broadly arcuate at middle; following sutures deep and straight. Legs moderate; claws simple.

**Liometophilus manni** sp. nov.

Dark brown, elytra with a subbasal and post-median transverse fascia in which the scales are paler; beak and prothorax finely granulose, each granule bearing a rounded appressed scale; beak also with numerous short, stout, erect scales. Prothorax with anterior margin reflexed, slightly notched at apex and bearing together with the discal and elytral costæ a single line of longer erect scales; disk of prothorax behind the transverse groove densely scaly and with a median impressed line. Elytra with rows of coarse punctures, somewhat as in *Areoschizus*; scales appressed except on the summits of the costæ. Legs clothed like the beak with appressed and short, stout, erect scales. Other characters as in the generic description, or in the figures. Length 3.5 mm.; width 1.2 mm.

Described from two examples taken by Mr. Wm. M. Mann, then of Stanford University, now at the Bussey Institution, Harvard University, Forest Hills, Mass. Mr. Mann writes me that the two specimens were found in runways of different nests of *Liometopum apiculatum* Mayr., Aug. 15, 1910, in Ramsey Canyon, Huachuca Mts., Arizona.

This very odd and interesting weevil is evidently a Cryptorhynch (Group Cryptorhynchi—Lec. & Horn Class.) but does not show close affinity to any genus known to me. Type in my collection; paratype in Mann collection.

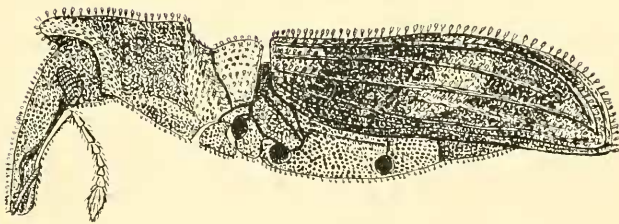
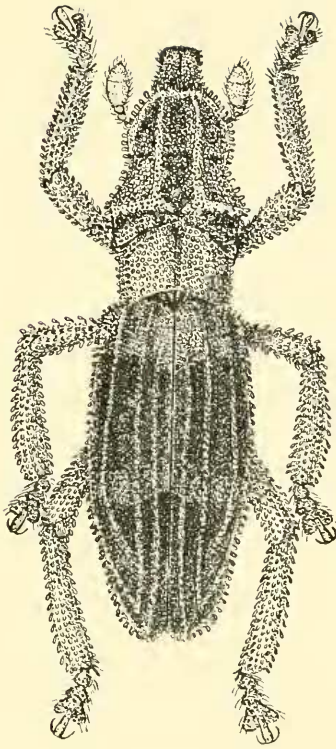
I am much indebted to Mr. A. B. Wolcott of the Field Museum of Natural History for the accompanying very characteristic figures (Plate 3). The eyes are drawn a little too large in the lateral view, as is also the antennal club in the dorsal aspect.

**Lophioderus ovipennis** sp. nov. (Scydmaenidæ).

Elongate, entirely rufotestaceous, impunctate; pubescence sparse, recurved. Antennae (♀) barely as long as the head and prothorax, the joints proportioned nearly as in *gracilis*. Head elongate, eyes much smaller than in *gracilis*, their diameter but slightly greater than the thickness of the basal joint of the antennæ. Prothorax distinctly longer than wide, widest at about the middle, form and sculpture as in *gracilis* except that the base and apex are more nearly equal, and the transverse basal impression is less distinct. Elytra nearly twice as long as wide, twice as wide as the prothorax, oval, widest at middle, sides obliquely narrowed to base, humeri completely wanting. All else as in *gracilis*. Length 1.65 mm.; width .55 mm.

Described from one of a series of specimens taken (IV-4-08) at Kendrick, Idaho, in nest of *Aphanogaster subterranea* var. *occidentalis* by Prof. A. L. Melander and sent me by Mr. Mann.

In its small eyes and obsolete humeri this species agrees best



FALL—LIOMETOPHILUS MANNI.

